



Image of the month

Hepatic parenchymal preservation surgery in liver trauma grade IV[☆]

Cirugía preservadora de parénquima en traumatismo hepático grado IV

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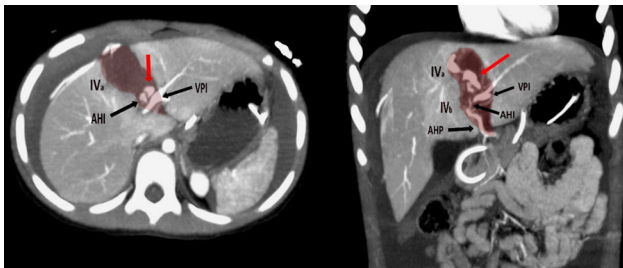


Fig. 1

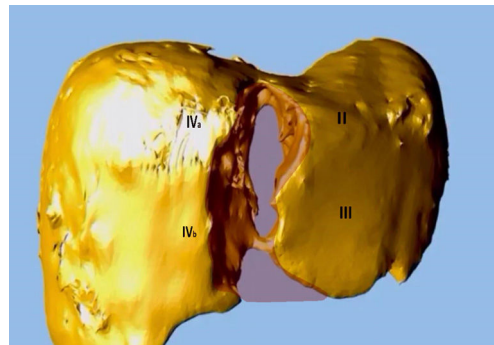


Fig. 2

The patient is a 7-year-old girl who was brought to the emergency department after abdominal trauma caused by a bicycle handlebar. She presented abdominal pain in the right upper quadrant and epigastric region, tachycardia and hypotension (BP: 91/53 and HR: 116 bpm). Physical examination revealed mucocutaneous paleness, abdominal hematoma, and pain with signs of peritoneal irritation. Hemoglobin: 10.4 g/dL. Abdominal ultrasound: segment IV liver contusion with multicompartimental fluid. CT angiogram (Fig. 1): large liver laceration in segments I and IV that spanned the entire liver parenchyma; associated vascular injury in the hilum with active arterial bleeding.

Given these findings, we conducted a laparotomy and found massive hemoperitoneum, grade IV liver laceration at the insertion of the falciform ligament, active arterial bleeding from the arterial branch of segment IV, and a small biliary laceration in the left intraparenchymal duct. The arterial and biliary lesions were sutured with 8/0 polypropylene, which avoided liver resection. We created a 3D reconstruction with HorosTM (Fig. 2). Three months later, abdominal ultrasound showed preserved liver parenchyma and arterial patency.

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